

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SGE5LEDOS-20L35KEX-AR5223OSSGSO.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002
[TEST] 102560753CRT-008_M-20L
[TESTLAB] Intertek
[ISSUE DATE] 09/19/2016
[UPDATE] 10/28/2016
[LAB-REF LUMCAT] CRT1609071034-005_M-20L
[MANUFAC] Spectrum Lighting
[LUMCAT] SGE5LEDOS-20L-35K-EX-AR5223OS-SG-SO
[LUMINAIRE] 5" DIAM. LED DOWNLIGHT SEMI-DIFFUSE CLEAR ANODIZED CONE
[OTHER] SHALLOW PROFILE
[OTHER] REGRESSED, INTEGRAL SOLITE GLASS LENS
[OTHER] 60.2 DEGREE BEAM ANGLE
[LAMP] N/A
[LAMPCAT] N/A
[OTHER] TOTAL LUMINAIRE WATTS IS APPROXIMATE
[OTHER] PHOTOMETRIC MEASUREMENTS TAKEN AT 120VAC
[OTHER] CCT OUTPUT MULTIPLIERS: 40K x 1.0, 30K x 1.0, 27K x 0.945
[OTHER] THIS REPORT UPDATED BY SPECTRUM LIGHTING, SCALED FROM 30L

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1794
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	89
Total Luminaire Watts	20.24
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.90
Spacing Criterion (90-270)	0.90
Spacing Criterion (Diagonal)	0.92
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.42 ft (Diameter)
Luminous Width (90-270)	0.42 ft (Diameter)
Luminous Height	0.00 ft

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LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	18847	18871	18703
55	7039	6990	6901
65	241	214	147
75	0	0	0
85	0	0	0

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0.0	1918.854	1918.854	1918.854	1918.854	1918.854	1918.854	1918.854	1918.854	1918.854	1918.854
2.5	1913.107	1910.270	1911.725	1909.251	1909.833	1909.251	1911.725	1910.270	1913.107	1910.270
5.0	1888.299	1888.081	1888.590	1889.754	1889.681	1889.754	1888.590	1888.081	1888.299	1888.081
7.5	1850.396	1850.251	1852.361	1852.142	1851.633	1852.142	1852.361	1850.251	1850.396	1850.251
10.0	1798.089	1796.125	1795.979	1797.216	1800.272	1797.216	1795.979	1796.125	1798.089	1796.125
12.5	1728.831	1729.049	1728.613	1732.614	1733.996	1732.614	1728.613	1729.049	1728.831	1729.049
15.0	1650.625	1645.896	1649.461	1651.862	1653.171	1651.862	1649.461	1645.896	1650.625	1645.896
17.5	1557.432	1557.796	1556.341	1557.505	1560.051	1557.505	1556.341	1557.796	1557.432	1557.796
20.0	1454.345	1454.709	1454.709	1454.491	1452.963	1454.491	1454.709	1454.709	1454.345	1454.709
22.5	1343.038	1337.582	1339.182	1342.019	1339.109	1342.019	1339.182	1337.582	1343.038	1337.582
25.0	1226.929	1221.473	1223.000	1223.073	1221.836	1223.073	1223.000	1221.473	1226.929	1221.473
27.5	1105.000	1096.343	1097.288	1098.380	1098.671	1098.380	1097.288	1096.343	1105.000	1096.343
30.0	967.575	960.009	959.718	959.936	961.246	959.936	959.718	960.009	967.575	960.009
32.5	814.727	806.943	803.960	806.798	810.290	806.798	803.960	806.943	814.727	806.943
35.0	650.167	645.074	646.457	647.621	646.602	647.621	646.457	645.074	650.167	645.074
37.5	491.790	488.735	491.645	492.227	487.280	492.227	491.645	488.735	491.790	488.735
40.0	353.638	351.674	355.311	354.002	349.564	354.002	355.311	351.674	353.638	351.674
42.5	244.949	245.386	245.604	245.095	242.840	245.095	245.604	245.386	244.949	245.386
45.0	171.690	172.490	171.908	171.836	170.381	171.836	171.908	172.490	171.690	172.490
47.5	126.149	125.712	125.494	125.785	123.966	125.785	125.494	125.712	126.149	125.712
50.0	94.793	94.211	93.848	93.775	92.465	93.775	93.848	94.211	94.793	94.211
52.5	71.077	71.004	70.713	70.204	69.622	70.204	70.713	71.004	71.077	71.004
55.0	52.016	51.871	51.653	51.289	50.998	51.289	51.653	51.871	52.016	51.871
57.5	36.011	36.011	35.939	35.575	35.284	35.575	35.939	36.011	36.011	36.011
60.0	22.043	21.825	21.971	21.534	20.952	21.534	21.971	21.825	22.043	21.825
62.5	9.458	9.239	9.385	8.948	8.585	8.948	9.385	9.239	9.458	9.239
65.0	1.310	1.164	1.164	0.946	0.800	0.946	1.164	1.164	1.310	1.164
67.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
85.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Angles **Horizontal Angles**

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	1918.854	1918.854	1918.854	1918.854	1918.854	1918.854	1918.854
2.5	1911.725	1909.251	1909.833	1909.251	1911.725	1910.270	1913.107
5.0	1888.590	1889.754	1889.681	1889.754	1888.590	1888.081	1888.299
7.5	1852.361	1852.142	1851.633	1852.142	1852.361	1850.251	1850.396
10.0	1795.979	1797.216	1800.272	1797.216	1795.979	1796.125	1798.089
12.5	1728.613	1732.614	1733.996	1732.614	1728.613	1729.049	1728.831
15.0	1649.461	1651.862	1653.171	1651.862	1649.461	1645.896	1650.625
17.5	1556.341	1557.505	1560.051	1557.505	1556.341	1557.796	1557.432
20.0	1454.709	1454.491	1452.963	1454.491	1454.709	1454.709	1454.345
22.5	1339.182	1342.019	1339.109	1342.019	1339.182	1337.582	1343.038
25.0	1223.000	1223.073	1221.836	1223.073	1223.000	1221.473	1226.929
27.5	1097.288	1098.380	1098.671	1098.380	1097.288	1096.343	1105.000
30.0	959.718	959.936	961.246	959.936	959.718	960.009	967.575

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CANDELA TABULATION - (Cont.)

32.5	803.960	806.798	810.290	806.798	803.960	806.943	814.727
35.0	646.457	647.621	646.602	647.621	646.457	645.074	650.167
37.5	491.645	492.227	487.280	492.227	491.645	488.735	491.790
40.0	355.311	354.002	349.564	354.002	355.311	351.674	353.638
42.5	245.604	245.095	242.840	245.095	245.604	245.386	244.949
45.0	171.908	171.836	170.381	171.836	171.908	172.490	171.690
47.5	125.494	125.785	123.966	125.785	125.494	125.712	126.149
50.0	93.848	93.775	92.465	93.775	93.848	94.211	94.793
52.5	70.713	70.204	69.622	70.204	70.713	71.004	71.077
55.0	51.653	51.289	50.998	51.289	51.653	51.871	52.016
57.5	35.939	35.575	35.284	35.575	35.939	36.011	36.011
60.0	21.971	21.534	20.952	21.534	21.971	21.825	22.043
62.5	9.385	8.948	8.585	8.948	9.385	9.239	9.458
65.0	1.164	0.946	0.800	0.946	1.164	1.164	1.310
67.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
70.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
75.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
77.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
82.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
85.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
87.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	637.58	N.A.	35.50
0-30	1194.39	N.A.	66.60
0-40	1595.47	N.A.	88.90
0-60	1788.86	N.A.	99.70
0-80	1793.96	N.A.	100.00
0-90	1793.96	N.A.	100.00
10-90	1616.56	N.A.	90.10
20-40	957.89	N.A.	53.40
20-50	1103.5	N.A.	61.50
40-70	198.49	N.A.	11.10
60-80	5.10	N.A.	0.30
70-80	0.00	N.A.	0.00
80-90	0.00	N.A.	0.00
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1793.96	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	177.40
10-20	460.18
20-30	556.81
30-40	401.08
40-50	145.61
50-60	47.77
60-70	5.10
70-80	0.00
80-90	0.00
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

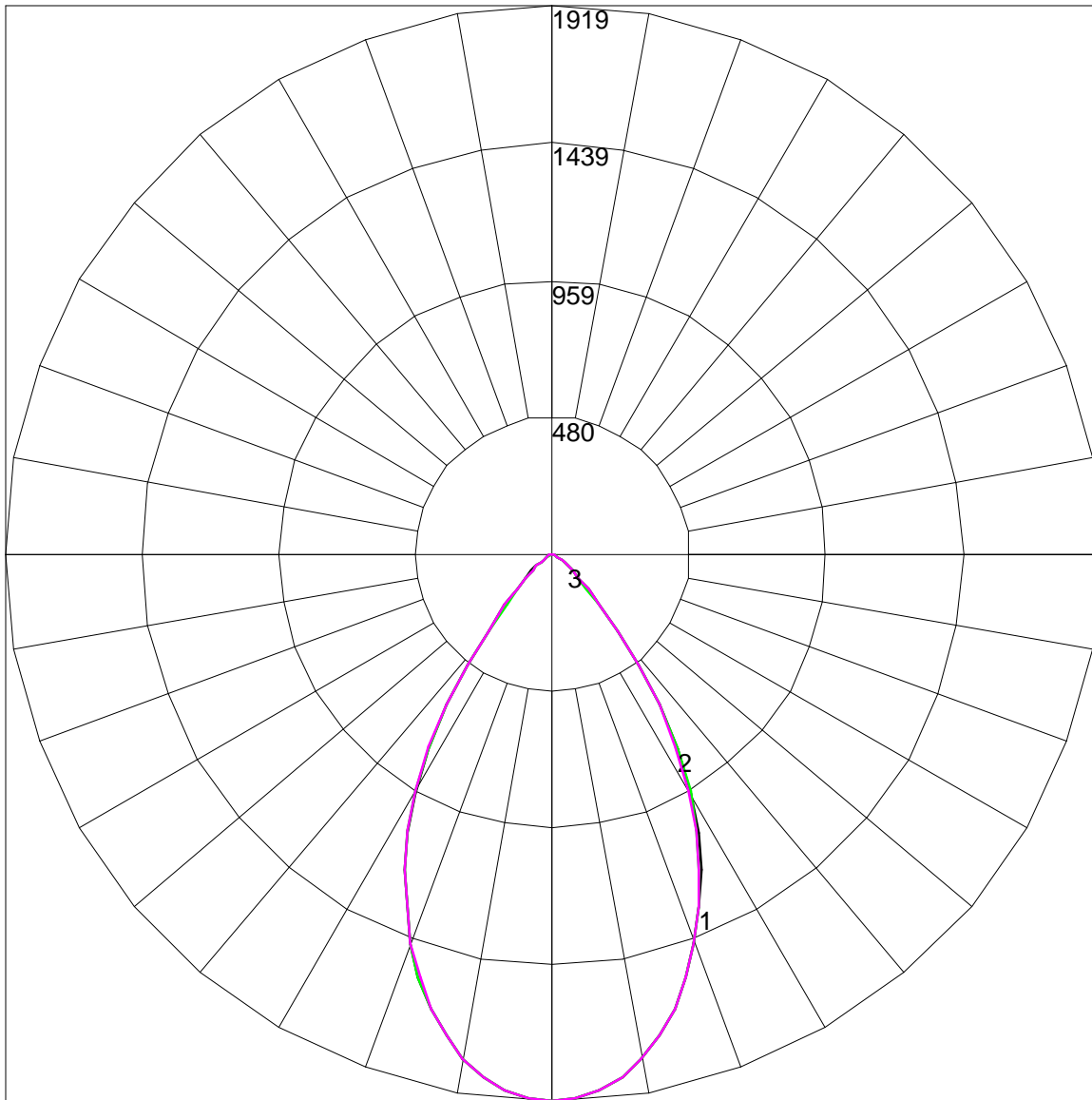
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	111	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93
2	108	102	98	95	105	101	97	94	98	94	92	95	92	90	92	90	88	86
3	102	95	90	86	100	94	89	85	91	87	84	89	85	83	86	84	81	80
4	96	89	83	79	95	87	82	78	85	81	77	83	79	76	81	78	75	74
5	91	83	77	72	90	82	76	72	80	75	71	78	74	71	77	73	70	68
6	86	77	71	67	85	76	71	66	75	70	66	73	69	65	72	68	65	64
7	82	72	66	62	81	72	66	62	70	65	61	69	64	61	68	64	61	59
8	78	68	62	58	77	67	62	57	66	61	57	65	60	57	64	60	57	55
9	74	64	58	54	73	64	58	54	63	57	54	62	57	53	61	56	53	52
10	70	60	54	50	69	60	54	50	59	54	50	58	53	50	58	53	50	49

POLAR GRAPH



Maximum Candela = 1918.854 Located At Horizontal Angle = 0, Vertical Angle = 0

1 - Vertical Plane Through Horizontal Angles (0 - 180)

2 - Vertical Plane Through Horizontal Angles (90 - 270)

3 - Vertical Plane Through Horizontal Angles (45 - 225)